DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018197
Date Inspected: 17-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 1000
OSM Departure Time: 1830
Location: Jobsite

CWI Name:	See below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

1). OBG Field Welding of Lifting Rod Access Penetration Inserts (SMAW)
2). OBG East Line Access Penetration Insert Welds (Fit-up and Preparation)
3). OBG East Line Access Penetration Insert Longitudinal Stiffener Weld (SMAW)
4). OBG Field Splice 6E/7E Weld ID: B1, Face A – (SMAW R-3 repair)

1). OBG Field Welding of Lifting Rod Access Penetration Insert (SMAW R-1 Repairs)
Interior: OBG 2E-PP17-E3 – weld 3
The QAI periodically observed AB/F approved welder Earl Espinoza (ID 5824) performing repair welding per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position of E3-weld 3. QC Inspector John Pagliero was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1001 Repair. Repair welding was completed at this location and the QAI observed that the work appeared to be in general compliance with contract documents.

Interior: OBG 3E-PP22-E4-welds 1 & 3
The QAI periodically observed AB/F approved welder Darcell Jackson (ID 9967) performing back welding per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position of E4-weld 1 & 3. QC Inspector John Pagliero was periodically present to monitor the progress and verify that the welding parameters were within the

limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1110B rev. 1. Welding was completed from the interior at E4-welds 1 & 3 and grinding was in process. The QAI observed that the work at this location appeared to be in general compliance with contract documents.

Interior: OBG 4E-PP25-E3 - welds 1 & 3
The QAI periodically observed AB/F personnel performing air carbon arc back gouging of welds 1 & 3 at OBG 4E-PP25-E3. Grinding of the back gouged areas was in process.

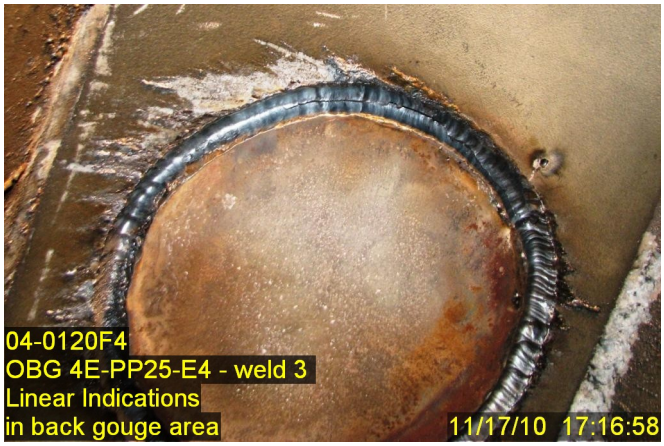
Interior: OBG 4E-PP25-E4 - welds 1 & 3
The QAI periodically observed AB/F approved welder Salvador Sandoval (ID 2202) performing air carbon arc back gouging of welds 1 & 3. The QAI was approached by QC Inspector John Pagliero while at this location. See Summary of Conversations below. The QAI obtained a photo of a linear indication in the back gouge in weld 3. See photo below. No welding was observed by the QAI at this location.

2). OBG East Line Access Penetration Insert Welds (Edge Preparation)
OBG East Line Access Penetration Insert Weld at 5E PP37.5 E2 SW
The QAI periodically observed AB/F approved welder Mick Chan (ID 9265) grinding to prepare for exterior welding of the OBG East Line Access Penetration Insert Weld at 5E PP37.5 E2 SW.
OBG East Line Access Penetration Insert Weld at 6E PP46.5 E2 SE
The QAI periodically observed AB/F approved welder Jin Pei Wang (ID 7299) grinding and operating the electric nibbler on the edge of the penetration and another AB/F personnel performing grinding on the edge of the insert to prepare the edges for fit-up.

3). OBG East Line Access Penetration Insert Longitudinal Stiffener Weld (SMAW)
3E PP23.5 E5 LSE
The QAI periodically observed AB/F approved welder Xiao Jian Wan (ID 9677) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position of the outside of OBG East Line Access Penetration Insert Longitudinal Stiffener Weld 3E PP23.5 E5 LSE. QC Inspector John Pagliero was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1012-3. Mr. Wan completed welding of the outer face and performed back grinding from the inner face. The QAI observed QC Inspector John Pagliero performing Magnetic Particle Testing (MT) of the back grind area prior to welding at this location. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI observed that welding was in process at this location and appeared to be in general compliance with contract documents.

4). OBG Field Splice 6E/7E Weld ID: B1, Face A – (SMAW R-3 repair)
The QAI periodically observed AB/F approved welder Jorge Lopez (ID 6149) performing air carbon arc gouging and grinding of one R-3 repair excavation on the exterior of the splice. See photo below. The QAI observed that the location and dimensions of the excavated area were as follows: Y = 510mm, Length = 140mm, Depth = 16mm and the Width = 30mm. The QAI observed QC Inspector Tony Sherwood performing Magnetic Particle Testing (MT) of the excavated area prior to repair welding at this location The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4.The QAI periodically observed repair welding per the Shielded Metal Arc Welding (SMAW) process in the 3G

(vertical) position. The QAI periodically observed QC inspector Tony Sherwood was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000 Repair. The work at this location was completed and appeared to be in general compliance with contract documents.



Summary of Conversations:

The QAI received a phone call from QC Lead inspector Bonafacio Daquinag Jr. Mr. Daquinag requested the QAI to meet him at the OBG Field Splice 7W/8W on the A deck. The QAI met Mr. Daquinag as requested and was asked to observe that a visual indication (arc strike) on weld A4 at Y = 5465mm (that the QAI had observed and reported to Mr. Daquinag on 11/15/10) had been removed by grinding. The removal area appeared to be in general compliance with contract documents.

From Item 1)

QC John Pagliero stated that the back gouges in welds 1 & 3 at 4E PP25 E4 were 7mm to 10mm deep and were full of linear indications.

Other conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer